Operating Instruction for Non-Contact Forehead InfraRed Thermometer

Please read this manual before switching the unit on.
Important safety information inside.

Content Page

1.General Description.....4
2.Safety Information.....5
3.Importance.....6
4.Features.....7
5.Description.....8
5-1.Meter Description.....8
5-2.Display Description.....9
6.Graphic Symbol Description.....10
7.Technical Specifications.....11
8.Instructions.....12
8-1.Measure Body Temperature.....12
8-2.Measure Surface Temperature.....13
9.Function Setting.....14
9-1.Body/Surface Setting.....14
9-2.Temperature Unit Setting.....14
9-3.Buzzer ON/OFF.....14
9-4.Longevity Use.....14
10.Maintenance and Cleaning.....15
11.This Appliance Conforms to the Following Standards.....16
12.Battery Replacement.....17
13.Troubleshooting.....18
13-1.The screen display the message "Hi".....18
13-2.The screen display the message "Lo".....18
14.EMC Statement.....19
15.Classification.....24
16.Disposal.....25

1.General Description

- Non-Contact Forehead Infrared Thermometer is specially designed to take the body temperature of a person regardless of room temperature.
- Depending on various skin types and thickness, there may be temperature difference.
- When the room temperature is significant difference, the body infrared thermometer should be left in that room during 15 to 20 minutes before using.

2.Safety Information

- This device must only be used for the purposes described in this instruction manual.
- This device must only be used in an ambient temperature range between 15 and 35°C.
- Do not expose this thermometer to electic shocks.
- Do not expose this thermometer to extreme temperature conditions of >50°C or >-20°C.
- Do not use the device in relative humidity higher than 85%.
- Do not use the device near large electromagnetic fields such as found with cordless or cell phones.
- Keep the device away from water and heat, including direct sunlight.
- Do not drop or knock the device, and do not use if damaged.
- It may affect the accuracy of measurements when the forehead is covered by hair, perspiration, cap or scarf.
- Keep the Measuring distance as 1~4cm.
- When the body infrared thermometer should be left in that room during 15 to 20 minutes before using.
- It may affect the accuracy of measurements when the forehead is covered by perspiration or other factors, please take the temperature behind the ear lobe.
- Clean the glass with a cotton bud lightly moistened with 70% alcohol.
- Do not recharge non rechargeable batteries, do not throw in fire.

3.Importance

- Before taking of the temperature make sure to remove hair and perspiration from the forehead.
- Selecting "**Body**" Mode to measure the body temperature; Selectin "**Surface**" Mode to measure the surface temperature.
- Use of this thermometer is not intended as a substitute fo consultation with your physician.
- Should a problem occur with your device, please contact your retailer, do not attempt to repair the device yourself.
- According to EMC standard, the medical electronic products should be maintained specially.
- Should a problem occur with your device, please contact your retailer, do not attempt to repair the device yourself.

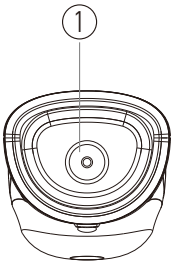
4.Features

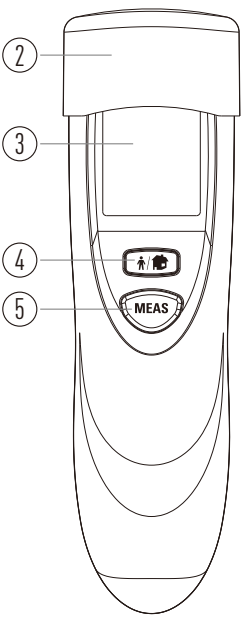
- Precise non-contact measurements
- Selectable Body and Surface temperature
- User selectable °C or °F
- Memorization of the last 10 measurements
- Automatic Data Hold & Auto power off
- Display Resolution 0.1°C (0.1°F)
- Backlight LCD display

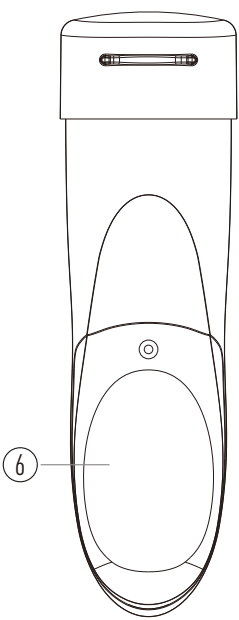
5.Description

5-1.Meter Description

1-Detector
2-Probe Cover
3-LCD Display
4-Memory / Set Button
5-Measure Button
6-Battery Cover

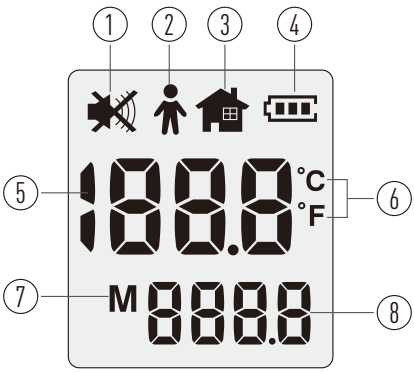






5-2.Display Description

1-Buzzer ON/OFF Symbol
2-Body Symbol
3-Surface Symbol
4-Low Power Indication
5-Measure Data
6-°C/°F Symbol
7-Memory Symbol
8-The Last Reading



6.Graphic Symbol Description

CE 0197	The device is in accordance with Medical Device Directive 93/42/EEC
FC	The device is in accordance with FCC Part 15 Subpart B
3V⎓	3V DC power supply
	In order to protect the environment, please recycle the battery according to the local regulations.
	Please read the instructions for use
	Attention, consult accompanying documents
	Type B equipment
	The name and the address of the manufacturer

7.Technical Specifications

Body Temp Range	32.0 to 42°C / 89.6 to 107.6°F
Surface Temp Range	0 to 60°C / 32 to 140°F
Basic Accuracy	±0.3°C
Measuring Distance	1-4cm
Response Time	1s
Over Range Indication	LCD will show "Hi"/"Lo"
Spectral Response	8 to 14μm
Power Off	Automatically shut off after approx. 7 seconds
Operating Temp	15 to 35°C (59 to 95°F)
Storage Temp	0 to 60°C (32 to 140°F)
Humidity Rate	20% to 80%RH (Storage) <80%RH (Operating)
Power	DC 3V (2x1.5V "AAA" batteries)
Battery Life	>1000 Times

8.Instructions

8-1.Measure Body Temperature

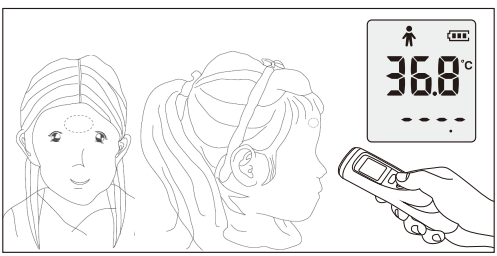
1.Remove the probe cover

2.Make sure working in "**Body Temperature**" mode, and LCD display the "".

3.Hold the meter by its handle and point it toward the forehead to be measured.

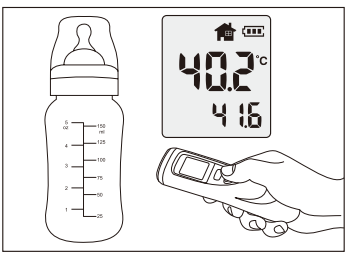
4.Press the **Measure** Button to turn the meter on and take a temperature reading.

5.If the battery power is enough, the LCD will light; if the LCD won't light or the low battery icon flashes, please replace new batteries.



8-2.Measure Surface Temperature

1.Remove the probe cover.
2.Make sure working in "**Surface Temperature**" mode, and LCD display the "".
3.Hold the meter by its handle and point it toward the forehead to be measured.
4.Press the **Measure** Button to turn the meter on and take a temperature reading.
5.If the battery power is enough, the LCD will light; if the LCD won't light or the low battery icon flashes, please replace new batteries.



8-3.Read Memory

Short press the **Memory/Set** Button to view memory data.

9.Function Setting

9-1.Body/Surface Setting

- Press **Memory/Set** Button for 2 seconds, **F1** will appear in the display.
- Release the button, press **Measure** Button to change measure mode.

9-2.Temperature Unit Setting

- Press **Memory/Set** Button for 2 seconds, **F2** will appear in the display.
- Release the button, press **Measure** Button to change temperature unit.

9-3.Buzzer ON/OFF

- Press **Memory/Set** Button for 2 seconds, **F3** will appear in the display.
- Release the button, press **Measure** Button to switch on/off buzzer.

9-4.Longevity Use

The Non-contact Body Infrared Thermometer was conceived for an intense and professional use, its longevity is guaranteed for 40000 takings.

10.Maintenance and Cleaning

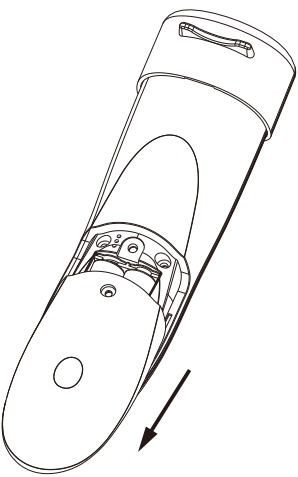
- The infrared Sensor is the most precise part, must be protected carefully.
- Clean the device with a cotton bud lightly moistened with 70% isopropyl alcohol, do not clean the device with corrosive detergent.
- Keep the device away from water or other liquid
- Store the device in a dry environment, and keep it away from dust and direct sunlight.
- Clean the sensor surface probe part, with a dry soft cloth.

11.This Appliance Conforms to the Following Standards

- ISO80601-2-56 and ASTM E1965-98
- EN 60601-1: Medical electrical equipment Part 1: General requirements for safety (IEC:60601-1)
- EN60601-1-11: Medical electrical equipment-Part 1-11: General requirements for basic safety and essential performance-Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment (IEC60601-1-11)

12.Battery Replacement

- The low-power symbol "▭" will be showed on the screen when press the button on device if battery power is low, please change a new 3V (2xAAA) battery.
- Turn on battery cover, and change battery.
- Remove battery from the device if it is not going to be used for a long time to extend battery life and to avoid damage to the device for due to leakage.
- Please note battery polarity, wrong placement may cause damage to the device.
- Do not let kids and pets swallow the battery in case of any danger.
- Do not damage, place or discard randomly the battery in case of leakage, overheat, firing or explosion.

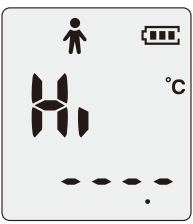


13.Troubleshooting

- If you happen to have one of the following problems while using your the non-contact forehead IR thermometer please refer to this breakdown service guide to help resolve the problem.
- If the problem persists please contact our customer service.

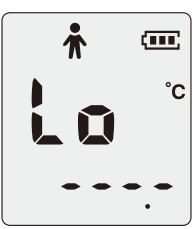
13-1.The screen display the message "Hi"

- when using the non-contact Body infrared thermometer the message HI can show on the screen.
- The analysis is above the measurement range selected, either superior to 42°C (107.6°F) in body mode or superior to 60°C (140°F) in surface mode.



13-2.The screen display the message "Lo"

- When using the non-contact Body infrared thermometer the message Lo can show on the screen.
- The analysis is under the measurement range selected, either less than 32°C (89.6°F) in body mode or less than 0°C (32°F) in surface mode.



14.EMC Statement

- This device has been tested and homologated in accordance with EN60601-1-2 for EMC.
- This does not guarantee in any way that the device will not be affected by electromagnetic interference, avoid using the device in high electromagnetic environment.
- The medical delectrical equipment needs special precautions egarding EMC and needs to be installed and put into service according to the EMC information provided in the accompanying documents.
- Portable and mobile RF communications equipment can affect medical eelectrical equipment.

Table 201-Declaration-Electromagnetic Emissions

Guidance and Manufacturer's Declaration-Electromagnetic Emissions		
The DT-8807H is intended for use in the electromagnetic environment specified below. The customer or the user of the DT-8807H should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment-Guidance**
RF emissions CISPR 11	Group 2	The DT-8807H must emit electromagnetic energy in order to perform its Intended function. Nearby electronic equipment may be affected.
RF emissions CISPR11	Class B	The DT-8807H Is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Not applicable	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable	

Table 202-Declaration-Electromagnetic Immunity -

Guidance and Manufacturer's Declaration-Electromagnetic Immunity

The DT-8807H is intended for use in the electromagnetic environment specified below.
The customer or the user of the DT-8807H should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment-Guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.

Table 204-Declaration-Electromagnetic Immunity-

Guidance and-Manufacturer's Declaration. Electromagnetic Immunity			
The DT-8807H is intended for use in the electromagnetic environment specified below. The customer or the user of the DT-8807H should assure that it is used in such an environment.			
Immunity Test	**IEC 60501 Test Level**	**Compliance Level**	**Electromagnetic Environment-Guidance**
			Portable and mobile RF communications equipment should be used no closer to any part of the DT-8807H paration distance calculated from the equation applicable to the frequency of the transmitter.
			Recommended separation distance
Conducted RF IEC 61000-4-6	3 Vrms 150k to 80MHz	3 Vrms	$d=1.2\sqrt{P}$
Radiated RF IEC 61000-4-3	3 V/m 80M to 2.5GHz	3 V/m	$d=1.2\sqrt{P}$, 80MHz to 800MHz
			$d=2.3\sqrt{P}$, 800MHz to 2.5MHz
			Where P is the maximum output power rating of the transmitter In watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur In the vicinity of equipment marked with the following symbol:
			

NOTE 1: At 80MHz end 800MHz the higher frequency range applies.
NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

[a] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the DT-8807H is used exceeds the applicable RF compliance level above, the Model Number or Type Number - by manufacturer should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Model Number or Type Number - by manufacturer.

[b] Over the frequency range 150kHz to 80MHz, field strengths should be less than [Vi] V/m.

Table 206 - Recommended separation distances between portable and mobile RF communications equipment and the DT-8807H

Recommended separation distances between portable and mobile RF communications equipment and the DT-8807H

The DT-8807H is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled.

The customer or the user of the DT-8807H can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the DT-8807H as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter W	**Separation Distance According to Frequency of Transmitter m**		
	150k to 80MHz $d=1.2\sqrt{P}$	80M to 800MHz $d=1.2\sqrt{P}$	800M to 2.5GHz $d=2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) accordable to the transmitter manufacturer.

NOTE 1: At 80MHz and 800MHz the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations, Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

15.Classification

Type of protection against electric shock	Internally powered equipment by batteries
Degree of protection against electric shock	TYPE B APPLIED PART
Degree of protection against ingress of water	IPX0, ordinary protection
Aethod(s) of sterilization or disinfection	70% isopropyl alcohol
Degree of safety of application in the presence of a flammable Anaesthetic mixture with ai or with oxygen or nitrous oxide	DT-8807H is not suitable for use in the presence of a flammable anaesthetic mixture with air or with oxygen or nitrous oxide
Mode of opration	Continous opration

16.Disposal

WEEE MARK

If you want to dispose this thermometer, do not mix with general household waster.
There is a separate collection system for used electronics products in accordance with legislation under WEEE Directive (Directive 2020/96/EC) and is effective only with in European Union.

The batteries must not be exposed to temperature above 65°C.

When your device is not used for a long time, remove the battery out of the compartment.

The batteries used in this thermometer must not be recharged as it may explode.

The batteries must not be short circuited, as it may cause burms or become a fire hazard.

Waste batteries must be disposed of properly, in order to preserve the environment.

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